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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,911	11/08/2000	Etsushi Yajima	09792909-4681	2666

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EXAMINER

MERCADO, JULIAN A

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 12/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/708,911

Applicant(s)

YAJIMA ET AL.

Examiner

Julian A. Mercado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 14 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 11, 14 and 16-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Remarks

This Office Action is responsive to applicant's amendment filed October 6, 2003.

The rejection of claim 16 under 35 U.S.C. 103(a) based on Kamauchi et al. and Oliver et al. has been withdrawn.

This Office Action presents a new ground of rejection and is therefore made NON-FINAL.

Claim Rejections - 35 USC § 102 and 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 11, 14 and 16-22 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kamauchi et al. (U.S. Pat. 5,538,814)

In the prior Office Action the examiner had noted that the claims are recited in product-by-process format and had given patentable weight solely to those limitations drawn to the electrode or product, i.e. an electrode having a rectangular carrier and a gel electrolyte film, wherein the gel electrolyte film has a width greater than that of the electrode carrier. This interpretation is now realized as incorrect and had actually given the claims the benefit of a narrow interpretation. Upon closer consideration, the gel electrolyte film and the electrodes are disclosed as mutually distinct components of the electrochemical cell, "a gel electrolyte film is formed on the positive electrode active material layer and the negative electrode active material

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layer". (specification on page 2) The gel electrolyte film while having a width greater than that of the electrode carrier does not give breadth or further define the claimed electrode. Thus, regarding independent claim 11 and dependent claims 14, 15 and 17-22, Kamauchi is maintained to teach the claimed invention in that Kamauchi et al. teaches a rectangular electrode [1] or [2].

Should applicant amend the scope of independent claim 11 so as to require patentable consideration of dependent claims 17 and 17-22 (which at present, since these limitations are drawn to the electrolyte and not the electrode *per se*, are not given patentable weight), applicant is reminded that Kamauchi et al. as discussed in the prior Office Action would read on these claims. Additionally, the rejection of dependent claim 16 based on Kamauchi et al. in view of Oliver et al. (while not relied upon in the present ground of rejection) would also be reinstated for the exact reasons discussed in the prior Office Action. At present, as dependent claim 16 recites limitations which further define the swelling solvent of the *electrolyte* [emphasis added], this limitation is not given patentable weight as it fails to further limit or structurally define the claimed electrode.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as obvious over Kamauchi et al. as applied to claims 11, 14 and 16-22 above, in view of Sun (U.S. Pat. 5,609,974)

The teachings of Kamauchi et al. are discussed above and in the prior Office Action.

Sun as discussed in the prior Office Action is relied upon to teach a "jelly roll" configuration, i.e. wherein the electrodes are rolled in a longitudinal direction, having an insulation material as an exterior cover and a positive and negative electrode lead protruding therethrough. The skilled artisan would have found obvious to employ the electrode of

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Kamauchi et al. as part of such a battery structure for reasons such as employing the flexibility and mechanical integrity of Kamauchi et al.'s electrode within a conventional battery configuration. (Sun, col. 7 line 66 et seq.)

Response to Arguments

To the extent that arguments against Kamauchi et al. may be applicable to the new ground of rejection, regarding Kamauchi et al. allegedly not teaching the claimed matrix polymer, this argument is not persuasive as it is outside the scope and structural definition of the presently claimed electrode.

The examiner notes that applicant did not address the examiner's rationale that that the claimed product appears to be the same or similar to the product disclosed in Kamauchi et al. (although the examiner concedes that Kamauchi et al. may employ a different process)

Allowable Subject Matter

Applicant is reminded that claims 1-10 are allowable for the reasons set forth in a prior Office Action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. While the present Markush group limitation in independent claim 11 is presently not given patentable weight as such limitation (being drawn to the matrix polymer) does not give breadth or scope to the claimed electrode, U.S. Patent 6,114,068 to Yamada et al. and U.S. Patent

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5,925,283 to Taniuchi et al. are cited to teach gel polymers that read on the presently claimed Markush group. To this extent, Applicant is advised that the any amendment to the claims, which resultantly necessitates a new ground(s) of rejection, will be considered in accordance with MPEP § 706.07(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian A. Mercado whose telephone number is (703) 305-0511. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (703) 308-2383. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



jam

December 6, 2003



Patrick Ryan
Supervisory Patent Examiner
Technology Center 1700